ENABLING PEOPLE WITH LOW VISION TO DRIVE LEGALLY AND SAFELY IN THE STATE OF MARYLAND



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Appreciation

Nancy Snowden

Retired case manager, Driver Wellness Division

Paula Caltrider, Cynthia Friedman

Current case managers

Jonathan Lyons, M.D.

Instrumental in establishing program

The impact of losing your driver's license



Driving

- Even limited driving preserves one's independence
- Study of drivers with macular degeneration in 1990s
 - Driving simulator test: Very poor performance
 - Driving records showed few accidents
 - Drivers self-limit their driving

What are the visual requirements for safe driving?

- Not really known
 - Each state has own requirements
- Visual acuity
- Visual field: 16 states with no requirement
 (Other visual factors: contrast, glare)
- Processing, cognition, reaction time, etc

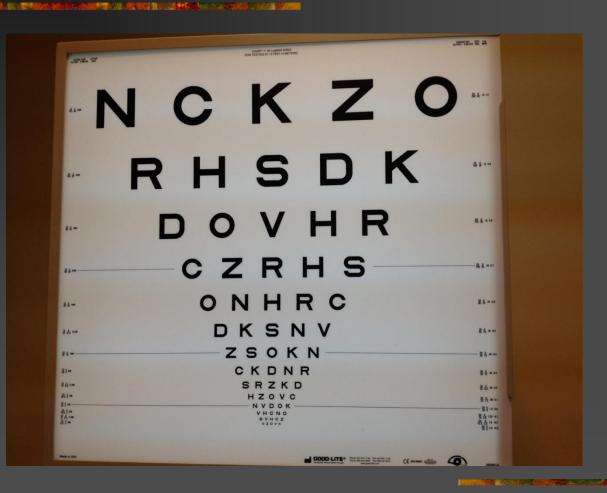
Measuring visual acuity

20/200

20/100

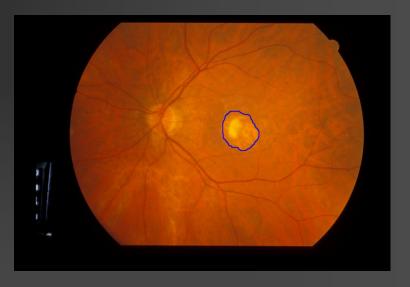
20/50

20/20



Macular degeneration

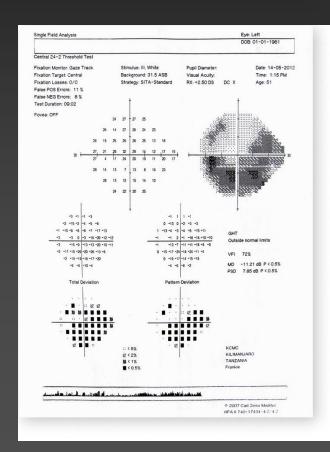


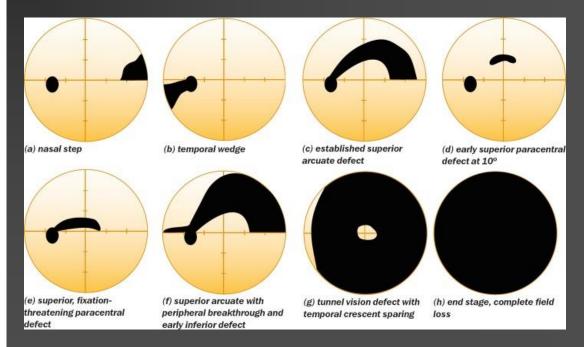


Also Diabetic retinopathy

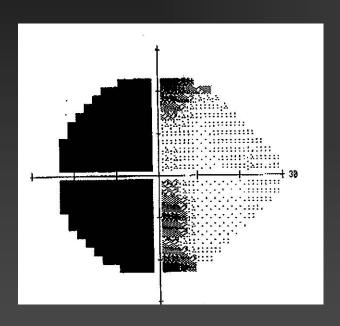
Measuring visual field

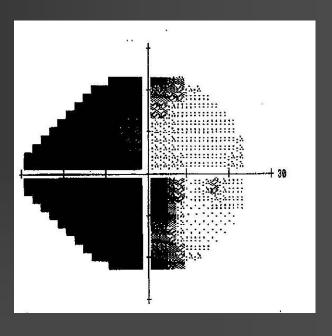
Glaucoma





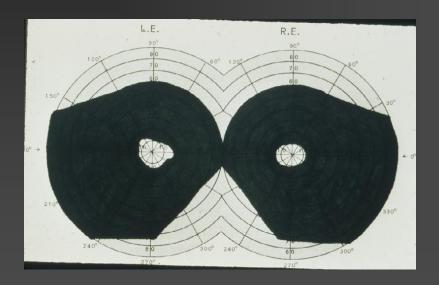
Stroke





Visual field defects

Retinitis Pigmentosa



Other aspects of vision

- Contrast sensitivity
- Glare sensitivity



Maryland driving requirements

- Unrestricted license:
 - 20/40 or better
 - Full visual field (140 degrees)

Maryland driving requirements

- Restricted license
 - **20/41-20/70**
 - Continuous visual field at least 110 degrees in diameter, 35 degrees to each side
 - Requires outside mirrors on each side

Maryland driving requirements

- Modified vision driving program qualifications
 - Visual acuity 20/71 20/100
 - Continuous visual field at least 110 degrees in diameter, 35 degrees to each side
 - Bioptic lenses can be used, but have to meet vision requirements with regular glasses
- Part of Maryland law

Process for Applicants

- Low vision package sent to client consisting of:
 - CONSENT FOR RELEASE OF CONFIDENTIAL INFORMATION
 - MODIFIED VISION PROGRAM FORM for eye doctor
 - PHYSICIAN'S REPORT FORM (for individuals with medical conditions other than vision-related)
 - HEALTH QUESTIONNAIRE
- *Reviewed by MAB ophthalmologist

Favorable Approval Experienced Drivers

- Letter is sent to the client
- Clinical and behind-the-wheel evaluation by a driver rehabilitation specialist (often an OT)
- *Reviewed by MAB ophthalmologist

Favorable Approval Experienced Drivers

 20 hours customized driver training is completed at MVA licensed driving school or certified driver education school.

- *Reviewed by MAB ophthalmologist
- MVA driving test
 - Regular course and road test
 - Modified if geographically restricted license sought

Favorable Approval Novice Drivers

- Letter is sent to the client
- Clinical evaluation by a driver rehabilitation specialist (often an OT)
- *Reviewed by MAB ophthalmologist

Favorable Approval Novice Drivers

- 10 hours of basic driver's education, pass written test
- Return to the rehabilitation facility for the behind-the-wheel portion.
- If favorable, a learner's permit is issued restricted to being accompanied by a <u>certified driver education instructor</u>).
- Complete 30 hours of classroom instruction
- 20 hours customized driver training is completed by <u>certified driver education</u> <u>instructor</u>

Favorable Approval Novice Drivers

- *Reviewed by MAB ophthalmologist
- Corrected learner's permit, 60 hours of logbook training with licensed driver (parent, mentor, spouse, guardian, friend)
- Driving test scheduled
 - Regular examiner, unless geographically restricted

Favorable Approval Experienced and Novice Drivers

If client passes driving test, he/she obtains driver's license that reflect these mandatory restrictions:

- G, Daylight Driving Only
- J, Vehicles 10,000 lbs or Less
- May also have geographic restrictions for example 5 mile radius, no highways

Favorable Approval Experienced and Novice Drivers

- Annual reports required from vision specialist for review by MAB ophthalmologist.
- Clients must continue to meet vision requirements

Unfavorable Recommendation

If MAB ophthalmologist is unable to make a favorable recommendation, client is offered an interview with the MAB ophthalmologist.

Removal of G Daylight Driving Only Restriction

- Client must be licensed for at least one year through low vision program.
- Contrast sensitivity, glare screening testing conducted by ophthalmologist.

Removal of G Daylight Driving Only Restriction

- Nighttime driver training completed at MVA licensed or certified driving school (no required minimum number of hours).
- Nighttime driving test successfully completed.
- Corrected license issued without G, Daylight Driving Only Restriction.

Crash Rate in all Groups

- Unrestricted Driving Population (Better than 20/40):
 - 15.6% Crash or moving violation
- Restricted Vision Population (20/40-20/70):
 - 15.2% Crash or moving violation
- Low Vision Population (126 drivers) (20/70-20/100):
 - 13.8% Crash or Moving Violation

Modified visual field program

- (Many people continue driving after a stroke and visual field cut)
- Program to try to enable select group of drivers to continue driving safely
- Similar process to modified vision program
- Not part of law currently; allowed by discretion of Medical Advisory Board

Issues regarding blind areas in visual field

- Unawareness of field defect and need to compensate
- Neglect
- Over compensating
- Use of prisms

You can help

- Inform people about program
- Call if you have questions

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Thanks for your interest